

## REMARKS

Claims 1-7, and 9-24 are pending in the application. Claim 8 was previously cancelled. Claims 21-23 are withdrawn. Claim 1 is amended based on the original specification as filed, including page 23, lines 18-26 and page 26, lines 1-15. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein. New Claim 24 is supported throughout the specification, including by original Claim 4.

### 1. REJECTION UNDER 35 U.S.C. § 102

Claims 1 and 3-20 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Kambe et al. (U.S. Pat. No. 6,599,631). This rejection is respectfully traversed.

The present invention as embodied in independent claim 1 is drawn to an aqueous dispersion that includes at least four separate components, including: (A) a swellable polymer/oligomer; (B) inorganic nanoparticles modified with a compound of formula I; (C) an amphiphile or a compound that can form a chelate ligand; and (D) a crosslinking agent, where the compound of formula I, (C), and (D) are different. The Kambe reference cannot anticipate the present claims as the reference is missing several of these claimed features. See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (Each and every element as set forth in the claim must be present in the reference for the claim to be anticipated.). Specifically, Kambe fails to disclose a dispersion where the compound of formula I, the amphiphile or organic compound capable of forming a chelate ligand, and the crosslinking agent are different. The rejection had equated the compound of formula I, (C), and (D) to be one in the same and allegedly provided by Kambe's linker compound. As amended, claim 1 forecloses this possibility.

Reconsideration of the claims and withdrawal of the rejection are requested.

## **2. REJECTION UNDER 35 U.S.C. § 103**

Claim 2 is rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, 35 U.S.C. 103(a) as allegedly unpatentable over Kambe et al. This rejection is respectfully traversed.

Kambe cannot establish a *prima facie* case of obviousness as the document fails to disclose the presently claimed dispersion where the compound of the general formula I, (C), and (D) are different. The rejection further fails to identify an apparent reason by which a skilled artisan would modify the Kambe document to include the missing subject matter. To establish a *prima facie* case of obviousness, the combined prior art references must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Or, if the references are missing claimed features, there must be some apparent reason either in the references or the general knowledge in the art by which to modify the references to include the missing subject matter. See *Id.* and *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007).

In particular, no apparent reason exists in the Kambe teachings by which a skilled artisan would be led to include the missing surface-modified inorganic nanoparticles and at least one crosslinking agent where the compound of the general formula I, the amphiphile or organic compound capable of forming a chelate ligand, and the crosslinking agent are different. Indeed, Kambe teaches that the linker compound is optional and that the inorganic particles can be directly bonded to the polymer. Kambe col. 4, lines 58-62. Thus, the focus in the Kambe document is bonding the inorganic particles to the polymer to form a composite, whether a linker compound is used or not. There is no reason for a skilled artisan to modify the Kambe formulation to include inorganic nanoparticles modified with a compound of formula I, a

different amphiphile or organic compound capable of forming a chelate ligand, and a different crosslinking agent.

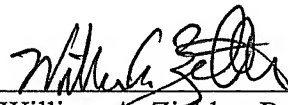
- Reconsideration of the claims and withdrawal of the rejection are requested.

### 3. CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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